AMENDMENT UNDER 37 C.F.R. § 1.111

Appln. No.: 10/571,317

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (withdrawn): A method for producing a stabilized fluoropolymer obtained via polymerization of an acid-derived group-containing perhalovinyl ether represented by the general formula (II):

$$CF_2=CF-O-(CFY^2)_m-A$$
 (II)

(wherein Y^2 represents F, Cl, Br or I, m represents an integer of 1 to 5; when m is an integer of 2 to 5, m atoms of Y^2 are the same or different; and A represents -SO₂X; X represents F, Cl, Br, I or $-NR^5R^6$; R^5 and R^6 are the same or different and each represents H, an alkali metal element, an alkyl group or a sulfonyl-containing group), and tetrafluoroethylene, wherein said stabilized fluoropolymer shows an intensity ratio [x/y] between main chain terminal carboxyl group-due peak [x] and -CF₂- due peak [y] of not higher than 0.05 in IR measurement, said stabilized fluoropolymer has a melt index of 0.1 to 20 g/10 min as measured under the conditions of 270°C and a load of 2.16 kg according to JIS K 7210,

which method comprises subjecting a treatment target substance containing a sulfonicacid-derived-group-containing fluoropolymer to a fluorination treatment,

wherein said sulfonic-acid-derived-group-containing fluoropolymer is a fluoropolymer containing $-SO_3M$ (in which M represents H, $NR^1R^2R^3R^4$ or $M^1_{1/L}$; R^1 , R^2 , R^3 and R^4 are the same or different and each represents H or an alkyl group containing 1 to 4 carbon atoms; and M^1 represents an L-valent metal), and

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said treatment target substance has a moisture content of not higher than 500 ppm by mass.

2. (withdrawn): The method for producing a stabilized fluoropolymer according to Claim 1,

wherein the sulfonic-acid-derived-group-containing fluoropolymer further contains $-SO_2X$ (wherein X represents F, Cl, Br, I or $-NR^5R^6$; R^5 and R^6 are the same or different and each represents H, an alkali metal element, an alkyl group or a sulfonyl-containing group).

3. (withdrawn): The method for producing a stabilized fluoropolymer according to Claim 1,

wherein the sulfonic-acid-derived-group-containing fluoropolymer further contains

-COOH at the polymer chain terminus or termini.

4. (withdrawn): The method for producing a stabilized fluoropolymer according to Claim 1,

wherein the fluorination treatment is carried out using a gaseous fluorinating agent comprising a fluorine source,

said fluorine source is at least one species selected from the group consisting of F₂, SF₄, IF₅, NF₃, PF₅, ClF and ClF₃ and

said fluorine source amounts to not less than 1% by volume of said gaseous fluorinating agent.

5. (withdrawn): The method for producing a stabilized fluoropolymer according to Claim 4,

wherein the fluorine source is F_2 .

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6. (withdrawn): The method for producing a stabilized fluoropolymer according to Claim 1,

wherein the sulfonic-acid-derived-group-containing fluoropolymer is a copolymer which is at least binary comprising

an acid-derived group-containing perhalovinyl ether represented by the general formula (I):

$$CF_2 = CF - O - (CF_2 CFY^1 - O)_n - (CFY^2)_m - A$$
 (I)

(wherein Y¹ represents F, Cl, Br, I or a perfluoroalkyl group, n represents an integer of 0 to 3; n atoms/groups of Y¹ are the same or different; Y² represents F, Cl, Br or I; m represents an integer of 1 to 5; when m is an integer of 2 to 5, m atoms of Y² are the same or different; A represents –SO₂X; X represents F, Cl, Br, I or –NR⁵R⁶; R⁵ and R⁶ are the same or different and each represents H, an alkali metal element, an alkyl group or a sulfonyl-containing group) and

a copolymerizable monomer with said acid-derived group-containing perhalovinyl ether, said copolymerizable monomer is an "other vinyl ether" other than said acid-derived group-containing perhalovinyl ether and an ethylenic monomer,

said copolymer comprises 5 to 40 mole percent of an acid-derived group-containing perhalovinyl ether unit derived from said acid-derived group-containing perhalovinyl ether, 60 to 95 mole percent of an ethylenic monomer unit derived from said ethylenic monomer and 0 to 5 mole percent of an "other vinyl ether unit" derived from said "other vinyl ether".

- 7. (withdrawn): The method for producing a stabilized fluoropolymer according to Claim 6, wherein n is 0 (zero).
- 8. (withdrawn): The method for producing a stabilized fluoropolymer according to Claim 6, wherein Y^2 is F and m is 2.

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- 9. (canceled).
- 10. (previously presented): A stabilized fluoropolymer obtained via polymerization of an acid-derived group-containing perhalovinyl ether represented by the general formula (II):

$$CF_2=CF-O-(CFY^2)_m-A$$
 (II)

(wherein Y^2 represents F, Cl, Br or I, m represents an integer of 1 to 5; when m is an integer of 2 to 5, m atoms of Y^2 are the same or different; and A represents -SO₂X; X represents F, Cl, Br, I or -NR⁵R⁶; R⁵ and R⁶ are the same or different and each represents H, an alkali metal element, an alkyl group or a sulfonyl-containing group) and tetrafluoroethylene,

wherein, in a hydrolyzate of said stabilized fluoropolymer, the number [X] of main chain terminal -CF₃ groups per 1 x 10⁵ main chain carbon atoms of said hydrolyzate is not smaller than 10 as calculated using an integrated intensity due to main chain terminal -CF₃ groups and an integrated intensity due to -CF₂- adjacent to an ether bond in side chains branched from the main chain in said hydrolyzate, each determined by solid state ¹⁹F nuclear magnetic resonance spectrometry of said hydrolyzate in a state swollen in an oxygen-containing hydrocarbon compound having a dielectric constant of not lower than 5.0 and further using an ion exchange equivalent weight Ew value determined by titrimetric method,

said stabilized fluoropolymer has a melt index of 0.1 to 20 g/10 minutes as measured under the conditions of 270°C and a load of 2.16 kg according to JIS K 7210.

11. (previously presented): The stabilized fluoropolymer according to Claim 10, wherein said fluoropolymer further shows an intensity ratio [x/y] between main chain terminal carboxyl group-due peak [x] and -CF₂- due peak [y] of not higher than 0.05 in IR measurement.

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12. (currently amended): The stabilized fluoropolymer according to <u>Claim 9 Claim 9 Cl</u>

13. (currently amended): The stabilized fluoropolymer according to Claim 9 Claim 10, which is obtained by the method according to Claim 7.

14-22. (canceled).